

REMARKS/ARGUMENTS

Reconsideration of this application is requested. Claims 1-11 remain pending in this application.

Claim 1 has been amended in order to more particularly point out and distinctly claim that which applicants regard as their invention and to direct the claim to preferred aspects of the disclosure. In particular, the feature of original claim 2, that is the presence of a tackifying resin in the first melted coating composition and the second melted coating composition, has been introduced into claim 1. Consequential changes have been made to in claims 2 and 4.

This application describes and claims the use of a slot coating process to secure tufting yarn to a primary backing material in a carpet making process. Various procedures were available in the art prior to the present invention as described in paragraphs [0002]-[0003] of the description and were primarily hot melt extrusion or roller coating based. However, slot coating is technically distinct from either of these procedures as the examiner acknowledges in the current Official Action.

Claims 1-8, 10 and 11 have been rejected on the basis of the combination of four or five references identified in item 2 of the Official Action while claim 9 is rejected in view of the same references plus an additional one as stated in item 3 of the Official Action.

The essential point applicants wish to address - which is key to the rejections stated in the Official Action - relates to the alleged "interchangeable use" of slot coaters and extrusion coaters for applying a hot-melt adhesive coating onto a substrate; *see* page 3, lines 8-10 of the Official Action as well as the examiner's comments in the last two lines of page 2 of the Official Action. Applicants totally disagree with the Examiner's "interchangeable" comments.

While it is agreed that slot coating is a well known procedure for hot coat melting in general none of these cited references relates the use of slot coating in making a carpet backing. In particular, applicants disagree with the assertion that it is a common practice to interchangeably use slot coaters and extruders.

Attention is directed to the attached copy from the on-line journal known as "Converting Magazine". The article attached discusses extrusion coating versus hot melt slot coating. Note the "Coating Methods" table at the end of the article which compares the viscosities of the materials suitable for extrusion coating versus slot coating.

For extrusion coating, the author of the article lists a viscosity range of 50,000 - 300,000 cps.

For slot coaters, the article lists a viscosity range of 15 - 20,000 cps.

In reading this the skilled person will appreciate that in an extruder, it is the action of the screw shearing the polymer against the heated barrel that causes the polymer to melt and be fed out to the die. In order to keep the feed consistent, the product must be fairly viscous, otherwise the extruded sheet would fall apart coming out of the die. With a slot coater, the polymer is heated in a tank, and then gravity flows down to a pump, which then pumps the material into the die head. In order to achieve necessary production rates, the polymer must have a low enough viscosity to first flow down into the pump, and then pump evenly into the die head – hence the significantly lower viscosity for slot coaters.

The distinctions between slot coaters and extruders is also featured in paragraph [0014] of the description. Applicants have found that in addition to a hot melt adhesive the presence of a tackifying resin is desirable as discussed in paragraph [0007] of the description. In practice the use of a tackifying resin or resins blended with a hot melt adhesive serves to adjust the viscosity of the mixture/blend to render the composition less viscous and hence suitable for slot coating operations.

For the above reasons, as well as those generally known in the art, slot coaters are not interchangeable with extrusion coaters. Slot coaters provide a means to efficiently and precisely apply the desired amount of adhesive composition to the carpet but at a rate of application lower than that of other coating techniques including extrusion coating. This leads to strong, lightweight and more flexible products as a result of employing smaller quantities of adhesive, yet meet the necessary performance requirements and specifications, all as discussed in paragraph [0014] of the description.

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Applicants submit that the claims of this application define inventive subject matter.
Reconsideration and favorable action are solicited.

Attention is directed to the concurrently filed Information Disclosure Statement.

Respectfully submitted,

NIXON & VANDERHYE P.C.

By: _____



Arthur R. Crawford
Reg. No. 25,327

ARC:eaw
901 North Glebe Road, 11th Floor
Arlington, VA 22203-1808
Telephone: (703) 816-4000
Facsimile: (703) 816-4100